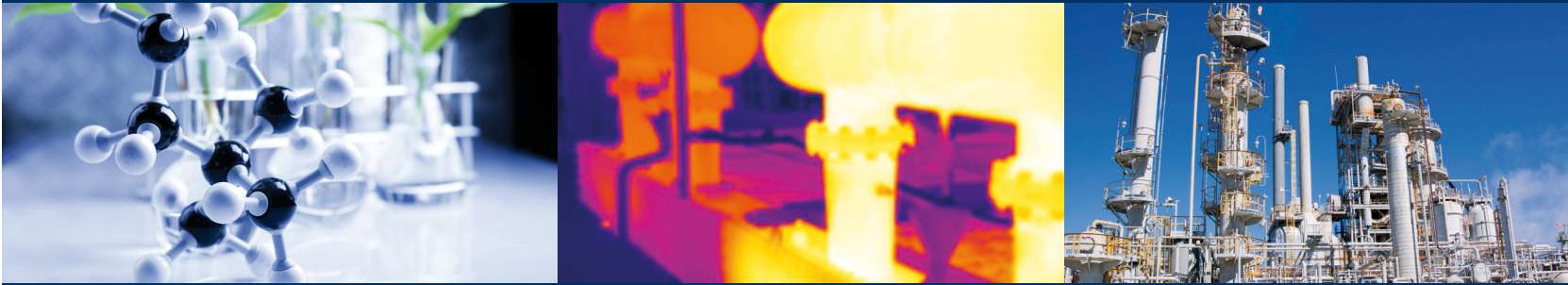


# Process Technological Unit

is committed to the development of innovative solutions for optimizing refinery and petrochemical processes.

The advantages our treatments can assure are considerable, such as increased process yield, extended plant running cycles, energy saving and maintenance costs cut.

We can offer a wide range of chemicals, some of which are patented, as well as an high level of service and continuous monitoring. We develop tailored solutions, selecting the most suitable technologies according to the plant characteristics and specific issues. Thanks to this approach, our technologies have been successfully and continuously applied for more than 30 years.



For more than 20 years Chimec has been leader in Thermal Cracking and Visbreaking applications, using technologies able to:

- Increase the unit yield conversion (Conversion Booster™)
- Extend the running cycle, reduce the fouling impact and improve the thermal exchange
- Improve the quality of the produced fuel oil
- Reduce the energy consumption and the greenhouse gas emission



Innovative solutions for optimizing  
Refinery and Petrochemical Processes

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**PROCESS TREATMENTS**  
Get more from your process





## Innovative Technologies and Service

### Salt Dispersant

Chimec Salt Dispersant technology allows to solve all those issues related to ammonium and amine salt deposition, by preventing the formation of new deposits and removing the already present ones. Chimec Salt Dispersant is a unique and patented technology, able to eliminate under-deposit corrosion, improve the thermal exchange efficiency and optimize the wash water consumption.

### FeS Dispersant

Chimec FeS Dispersant technology allows to solve issues related to Iron Sulphide deposition, by removing inorganic deposits mainly consisting in corrosion by-products carried with the process flow from upstream equipment. This technology allows to restore the correct heat transfer in heat exchangers and the distillation columns fractionation efficiency.



### Conversion Booster™

Chimec Conversion Booster™ program allows to increase the isoviscous conversion of thermal cracking plants (eg.: Visbreaking Unit) through a more severe management of the process, and at the same time assuring the quality of the finished product (fuel oil) and the required length of a determined cycle.

### Quality Booster™

Chimec Quality Booster™ program allows to increase the isoviscous conversion of thermal cracking plants (eg.: Visbreaking Unit), and at the same time assuring an appropriate cycle length and improving the quality of the produced bitumen.

### Quench Oil Viscosity Control™

Quench Oil Viscosity Control™ technology allows to reduce the viscosity of the Fuel Oil Cracking (FOK) produced by the ethylene plant. It allows to achieve a greater heat exchange efficiency in the bottom exchangers of the primary fractionator, an increased production of dilution steam, an increased temperature at the bottom of the column and consequently an increased production of pyrolytic gasoline. An higher system stability is the whole result this technology can assure.

## PROCESS TREATMENTS

Get more from your process



### NAC Defender (Technologies for Opportunity Crudes)

A complete and integrated portfolio of solutions to ensure a smoother management during Opportunity Crudes processing:

- Chemical treatment for naphthenic crude oils
- Demulsifiers specific for acid crude oils
- Metal Scavenger Technology for removal of organic metals from the feed, such as Fe and Ca
- Triazine Cracking Catalyst for mitigating the issues related to processing of amine-based-H<sub>2</sub>S scavenger contaminated crude oils.

### Reactor Plus Technology

The aim of the Reactor Plus Technology is to recover hydraulic efficiency in the catalytic reactor bed of hydro-processing and hydro-treating units. The application of this technology allows to dramatically decrease the unit shut-down frequency.

### Energetic Footprint

The Energetic Footprint is a new software designed by CHIMEC to evaluate the energy consumption of the whole crude distillation unit process. This software sharply calculates the energy required by each section of the system, thus allowing a quick identification of the most crucial parameters related to the energy consumption. The continuous monitoring through this software allows to optimize process performances, thus reducing energy consumption and greenhouse gas emissions.

### Petrochemical Industry

Chimec has developed a complete portfolio of solutions for petrochemical Industry, including patented and innovative technologies, able to mitigate and solve all the issues commonly affecting petrochemical plants, such as Steam Cracking, Butadiene Extraction, Aromatic units, etc.

- Quench Oil Viscosity Control™
- Gum inhibitors
- Antifoulings
- Dispersants
- Carbonyl Scavengers
- Corrosion Inhibitors
- Antifoams
- Oxygen Scavengers